## Generative artificial intelligence (GenAI) and the post-secondary landscape: Some wonders from an associate dean and former teacher-librarian

By Jennifer L. Branch-Mueller

## **Snapshot**

Welcome to Professor Jennifer Branch-Mueller - our 2025 Reflections and Actions section guest. We are thrilled to have her write this section across 2025 and value her insight and commentary. Branch-Mueller's first article explores GenAl and the various benefits and concerns around its use in tertiary education and how emerging opportunities are there for secondary level teacher-librarians to take the lead.

I am currently serving as the Associate Dean, Academic and Student Experience in the Faculty of Education at the University of Alberta in Edmonton, Canada. I was a teacher and teacher-librarian and have been a professor for the past 25 years.

Generative Artificial Intelligence (GenAI) is being talked about at every instructor meeting I attend. There are a lot of questions but not a lot of answers right now. Some of our instructors have a touch of technophobia and GenAI adds to their fear. There is also concern that our students

are becoming too reliant on GenAl tools. In a recent meeting, we heard stories of students saying that if they are not using GenAl, they are falling behind because all the other students are using it. Instructors fear that students are becoming too reliant on Al tools (Rowsell, 2025). My colleagues are worried about equity and privacy issues that come with GenAl use. As students turn to GenAl, how are we preparing them to think critically about the results that are generated?

As students turn to GenAl, how are we preparing them to think critically about the results that are generated?

We are all on a steep learning curve with GenAI. What is the difference between ChatGPT and Grammarly for proofreading? What about the stories we have heard about GenAI creating fake references? How can GenAI tools support students and their learning? How are students using GenAI now and how might they use it in the future? At the University of Alberta, we have created messaging for course outlines to help clarify how GenAI can be used in academic work. But putting these expectations on course outlines doesn't go far enough. We need to have sustained conversations with students about GenAI. We know that our students are using GenAI, so how can we help them use it ethically? Instructors are learning about AI Detectors but how can they be sure that those detectors actually work?

Resources have been created to help instructors with teaching and learning in the age of GenAl. Please see the references for more information. We have noticed an increase in 'contract

cheating' in the past several years. At the University of Alberta, we have ten times the number of academic integrity cases this year. And we know that this is just the tip of the iceberg as some instructors are not checking for GenAl use. Universities have created academic integrity tutorials to help students understand the broader implications of GenAl use for the academy. These

This is an opportunity for you to take a leadership role by staying upto-date with the latest GenAl developments.

can include disciplinary actions, professional conduct, erosion of trust between the instructor and the student, and challenges to the learning environment. Students may not consider how AI use can damage the value of their degree, program accreditation, and the reputation of the university (Flanagan, 2025). The burden of GenAI use seems to fall to the student to figure out the expectations in each individual course with each individual instructor. Perhaps, instead, instructors need to learn more about how students are using GenAI (Nagelhout, 2024).

Instructors are interested in how GenAl can and is impacting student learning. At the University of Alberta, we are using a ChatGPT Assistant in one of our large undergraduate courses to answer student questions (Bredberg, 2024). So far, the students are liking the real time answers they receive. Another colleague is researching the use of GenAl to provide immediate feedback on writing assignments submitted by students in our English Language School. Yet, instructors are worried about how GenAl is impacting students' ability to write. Concerning too is whether future students will lose the ability for sensemaking that happens through iterative writing tasks.

So what does this mean for teacher-librarians working in schools? This is an opportunity for you to take a leadership role by staying up-to-date with the latest GenAl developments. Talk to your teaching staff about the possibilities and pitfalls of Al use. Develop academic integrity policies that clarify GenAl use and share information with parents who may also be struggling to understand this new landscape. You can also support your teachers by helping calm fears and building understanding of how to use GenAl for learning. Offer to help develop assessment practices that support or limit GenAl use depending on the learning outcomes of the learning task.

Teacher-librarians have an important role to play in helping to prepare students for the world of GenAl. You can help students understand the implications of GenAl use for their own learning and skill development as well as what it means for the value of their high school and post-secondary qualifications. Providing equitable access to GenAl tools will help students develop the skills they need to support their own learning. In my own dealing with 'contract cheating' cases,

You can help students understand the implications of GenAl use for their own learning and skill development...

many of the students used AI because they felt they had no other choice. They speak to the need for time management skills and effective approaches for writing papers and essays, and they bemoan their own lack of research and study skills. Teacher-librarians can provide workshops for students and advocate for these skills to be taught in the context of classroom assignments.

Teacher-librarians can provide workshops for students and advocate for these skills to be taught in...context..

Generative Artificial Intelligence offers benefits for many teachers and students. Teacher-librarians are well positioned to take a leadership role in their school communities to dispel fears, support understanding, develop skills for effective GenAI use while also continuing to teach research and study skills.

## References

Bredberg, L. (2024, May 18). Intelligent tutoring systems for personalized learning. *The Medium*. <a href="https://medium.com/@lennartbredberg/intelligent-tutoring-systems-for-personalized-learning-9c5249193063">https://medium.com/@lennartbredberg/intelligent-tutoring-systems-for-personalized-learning-9c5249193063</a>

Bruni, F. (2023, December 21). Our semicolons, ourselves. *New York Times*. <a href="https://www.nytimes.com/2023/12/21/opinion/chatgpt-artificial-intelligence-writing.html">https://www.nytimes.com/2023/12/21/opinion/chatgpt-artificial-intelligence-writing.html</a>

Cohen, N. (2024). Generative AI in classrooms: Cheating or the future of education. *Forbes*. <a href="https://www.forbes.com/sites/niritcohen/2024/09/22/generative-ai-in-classrooms/">https://www.forbes.com/sites/niritcohen/2024/09/22/generative-ai-in-classrooms/</a>

Coldwell, W. (2024, December 15). 'I received a first but it felt tainted and undeserved': inside the university AI cheating crisis. *The Guardian*. <a href="https://www.theguardian.com/technology/2024/dec/15/i-received-a-first-but-it-felt-tainted-and-undeserved-inside-the-university-ai-cheating-crisis">https://www.theguardian.com/technology/2024/dec/15/i-received-a-first-but-it-felt-tainted-and-undeserved-inside-the-university-ai-cheating-crisis</a>

Cryer, D. (2024, December 9). To use AI or not to use AI?: A student's burden. *Inside Higher Ed*. <a href="https://www.insidehighered.com/opinion/views/2024/12/09/ai-shifts-responsibility-academic-integrity-opinion">https://www.insidehighered.com/opinion/views/2024/12/09/ai-shifts-responsibility-academic-integrity-opinion</a>

Davalos, J., & Yin, L. (2024, October 18). Al detectors falsely accuse students of cheating—with big consequences. *Medium*. <a href="https://www.bloomberg.com/news/features/2024-10-18/do-ai-detectors-work-students-face-false-cheating-accusations">https://www.bloomberg.com/news/features/2024-10-18/do-ai-detectors-work-students-face-false-cheating-accusations</a>

Dubinski, K. (2023, January 12). Cheating on the rise in universities and colleges, and artificial intelligence could make it worse. *CBC News*. <a href="https://www.cbc.ca/news/canada/london/cheating-on-the-rise-in-universities-and-colleges-and-artificial-intelligence-could-make-it-worse-1.6710298">https://www.cbc.ca/news/canada/london/cheating-on-the-rise-in-universities-and-colleges-and-artificial-intelligence-could-make-it-worse-1.6710298</a>

Edwards, H. (2024, February 23). Sensemaking and Al. *artificiality*. <a href="https://www.artificiality.world/sensemaking/">https://www.artificiality.world/sensemaking/</a>

Flanagan, W. (2024, September 27). What to do when academic integrity concerns arise: 2024 guide. *Infonetica*. <a href="https://www.infonetica.net/articles/academic-integrity-concern-detected">https://www.infonetica.net/articles/academic-integrity-concern-detected</a>

Grove, J. (2024, November 1). Student Al cheating cases soar at UK universities. *Times Higher Education*. <a href="https://www.timeshighereducation.com/news/student-ai-cheating-cases-soar-uk-universities">https://www.timeshighereducation.com/news/student-ai-cheating-cases-soar-uk-universities</a>

Harvard Graduate School of Education. (2024, September 10). *Students are using AI already. Here's what they think adults should know*. <a href="https://www.gse.harvard.edu/ideas/usable-knowledge/24/09/students-are-using-ai-already-heres-what-they-think-adults-should-know">https://www.gse.harvard.edu/ideas/usable-knowledge/24/09/students-are-using-ai-already-heres-what-they-think-adults-should-know</a>

Kier, C. A., & Ives, C. (2022). Recommendations for a balanced approach to supporting academic integrity: Perspectives from a survey of students, faculty and tutors. *International Journal for Educational Integrity*, 18. <a href="https://edintegrity.biomedcentral.com/articles/10.1007/s40979-022-00116-x">https://edintegrity.biomedcentral.com/articles/10.1007/s40979-022-00116-x</a>

Lau, Y. (2024, May 8). Why students still need to learn to write in the age of Al. *Linkedin*. <a href="https://www.linkedin.com/pulse/why-students-still-need-learn-write-age-ai-yolanda-lau-ikt3c">https://www.linkedin.com/pulse/why-students-still-need-learn-write-age-ai-yolanda-lau-ikt3c</a>

Lawrence, A. (2024, July 17). *Grammarly vs. ChatGPT for proofreading*. <a href="https://medium.com/tech-and-me/grammarly-vs-chatgpt-for-proofreading-ac1d7e5008f3">https://medium.com/tech-and-me/grammarly-vs-chatgpt-for-proofreading-ac1d7e5008f3</a>

Mintz, S. (2024, November 25). Transforming history education into a more immersive, interactive process of inquiry and discovery. *Inside Higher Ed*. <a href="https://www.insidehighered.com/opinion/blogs/higher-ed-gamma/2024/11/25/using-ai-make-history-teaching-and-learning-more-impactful">https://www.insidehighered.com/opinion/blogs/higher-ed-gamma/2024/11/25/using-ai-make-history-teaching-and-learning-more-impactful</a>

Nagelhout, R. (2024, September 10). *Students are using Al already. Here's what they think adults should know*. <a href="https://www.gse.harvard.edu/ideas/usable-knowledge/24/09/students-are-using-ai-already-heres-what-they-think-adults-should-know">https://www.gse.harvard.edu/ideas/usable-knowledge/24/09/students-are-using-ai-already-heres-what-they-think-adults-should-know</a>

Rowsell, J. (2025, January 17). *Academics 'fear students becoming too reliant on AI tools'*. <a href="https://www.timeshighereducation.com/news/academics-fear-students-becoming-too-reliant-ai-tools">https://www.timeshighereducation.com/news/academics-fear-students-becoming-too-reliant-ai-tools</a>

The Learning Network. (2024, January 25). What students are saying about learning to write in the age of A.I. *New York Times*. <a href="https://www.nytimes.com/2024/01/25/learning/what-students-are-saying-about-learning-to-write-in-the-age-of-ai.html">https://www.nytimes.com/2024/01/25/learning/what-students-are-saying-about-learning-to-write-in-the-age-of-ai.html</a>

Times Higher Ed. (2025). *Al and assessment in higher education*. <a href="https://www.timeshighereducation.com/campus/spotlight/ai-and-assessment-higher-education">https://www.timeshighereducation.com/campus/spotlight/ai-and-assessment-higher-education</a>

United for Literacy. (2023). *The artificial intelligence revolution and literacy: Opportunity and threat*. <a href="https://www.unitedforliteracy.ca/getmedia/338fcfe8-e29f-4cab-966c-5ca82c9a47ee/The-Artificial-Intelligence-Revolution-and-Literacy-Opportunity-or-Threat.pdf">https://www.unitedforliteracy.ca/getmedia/338fcfe8-e29f-4cab-966c-5ca82c9a47ee/The-Artificial-Intelligence-Revolution-and-Literacy-Opportunity-or-Threat.pdf</a>

UNESCO. (2024, February 23). *Critical thinking and generative artificial intelligence*. <a href="https://www.ibe.unesco.org/en/articles/critical-thinking-and-generative-artificial-intelligence">https://www.ibe.unesco.org/en/articles/critical-thinking-and-generative-artificial-intelligence</a>

Warner, J. (2024, May 31). Teaching writing in a generative Al world: A compendium. *Inside Higher Education*. <a href="https://www.insidehighered.com/opinion/blogs/just-visiting/2024/05/31/how-think-about-teaching-writing-genai-world">https://www.insidehighered.com/opinion/blogs/just-visiting/2024/05/31/how-think-about-teaching-writing-genai-world</a>

Jennifer Branch-Mueller is Associate Dean, Academic and Student Experience, in the Faculty of Education at the University of Alberta in Edmonton, Alberta, Canada. In this full-time administrative role, Jennifer is responsible for supporting the Education Student Services team who work with almost 3000 Bachelor of Education students. She also coordinates scheduling of classes for all of the undergraduate and graduate students in the faculty. Jennifer is a Professor in Teacher-Librarianship Education and is currently teaching graduate students in the Master of Education program. She is currently the President of the International Association of School Librarianship.